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## Agenda Item 4c

May 17, 2011

### TO: MEMBERS OF THE BENEFITS AND PROGRAM ADMINISTRATION COMMITTEE

- I. **SUBJECT:** Actuarial Valuation Report for the Legislators' Retirement System as of June 30, 2010 and Employer Contribution Rate for the 2011-2012 Fiscal Year
- II. **PROGRAM:** Actuarial Office
- III. **RECOMMENDATION:**

It is recommended that the Committee accept and recommend to the Board of Administration the following:

- Approval of the June 30, 2010 Legislators' Retirement System Actuarial Valuation Report along with the change in assumptions (lowering the discount rate from 7% per year to 6% per year)
- Adoption of an employer contribution rate of 0% as well as a 0% contribution rate for all members for the period of July 1, 2011 to June 30, 2012.
- Transmittal letter to the Governor and Legislature
- The use of a 6% discount rate assumption in all affected member calculations effective as follows:
  - a. For service credit purchases under the "present value" method, the use of the new discount rate will apply to all applications postmarked on or after May 19, 2011.
  - b. For retirement applications, any application with a retirement date on or after May 19, 2011 will be subject to the new discount rate.

### IV. ANALYSIS:

Enclosed is the CalPERS staff actuarial valuation report as of June 30, 2010 for the Legislators' Retirement System. Also attached is the transmittal letter to the Governor and Legislature. The table on the following page summarizes key results from the valuation:

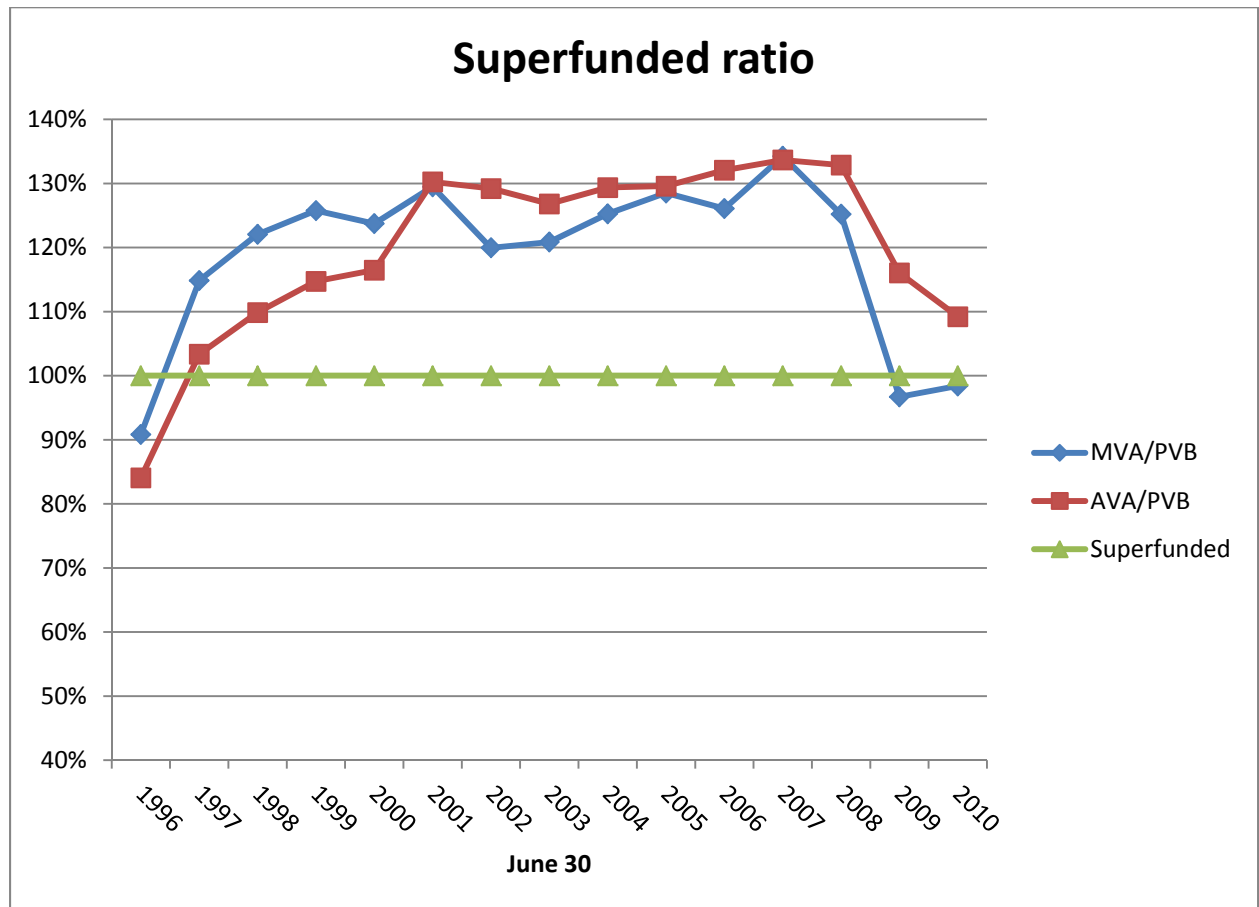
	<b>June 30, 2009 (FY 2010-11)</b>	<b>June 30, 2010 (FY 2011-12)</b>
Present Value of Benefits (PVB)	\$115,640,047	\$115,950,719
Actuarial Value of Assets (AVA)	\$134,195,015	\$126,641,553
Superfunded	Yes	Yes
Market Value of Assets (MVA)	\$111,829,179	\$114,104,852
Recommended Employer Contribution Rate	0%	0%
Recommended Employee Contribution Rate	0%	0%

A court case involving past due payments totaling \$7,696,227 (including interest) was settled and paid on March 11, 2010. This payment was included in the present value of benefits (PVB) as of June 30, 2009. The payment occurred during fiscal 2009-2010 and was reflected in the reconciliation of the market value of assets (MVA) and the actuarial value of assets (AVA).

In February 2000, the Board of Administration moved to set the member contribution rate of this system to 0% on an annual basis according to the superfunded status of this system. By definition, a plan is superfunded if the AVA exceeds the PVB. Please note that the AVA as of June 30, 2010, calculated as 111% of the MVA, continues to exceed the PVB. However, due to the court settlement mentioned earlier, two underperforming investment return years (2008: 0.0% and 2009: -10.2%), and the lowering of the discount rate from 7% per year to 6% per year, the MVA has not exceeded the total PVB over the past two valuations (June 30, 2009 and June 30, 2010).

From 1997 through 2008, both the MVA and AVA exceeded the PVB by a healthy margin. Since the AVA is a smoothed asset value, it has exceeded the PVB over the last two valuations. A plan can be superfunded by a \$1 or by \$20 million. In a perfect world, either superfunded plan would have sufficient assets to pay benefits since all assumption will be realized in the aggregate. However, we live in an imperfect world. Obviously the plan that is superfunded by \$20 million is in better “shape” or “health” than the plan that is superfunded by \$1. Perhaps a better measure of the superfunded status is a ratio of the assets to the PVB (superfunded ratio).

The graph on the following page shows the history of the superfunded ratio:



The MVA exceeded the PVB by more than 20% from 1998 to 2008. It dipped just below the PVB in 2009 and with the change in discount rate from 7% per year to 6% per year, it remains slightly below in 2010. The Legislator' Retirement Fund (LRF) received minimal contributions during the last decade. The LRF has sustained itself through investment earnings alone. The volatility index (assets/payroll ratio) is exceptionally large for this plan. This plan's asset value exceeds \$100 million. The projected payroll for the upcoming fiscal year has shrunk to less than \$2 million. This means that the volatility index for this plan is 50+. **If the plan suffers another significant loss (investment, or unexpected large benefit payment), employee contributions will need to be reinstated. In addition, contributions from the State would be required.**

### **Discount Rate Assumption**

Last month, the Board approved a new asset allocation strategy for the LRF. The first step required following a change to the assets allocation strategy is to determine whether or not a change to the discount rate is necessary.

The current discount rate assumption is 7.00%. This discount rate was based on an expected investment return before administrative expenses of 7.25% and 0.25% for administrative expenses.

As part of its review of the discount rate assumption, the first step the Actuarial Office took was to review the appropriateness of the expected administrative expenses. A review of the administrative expenses over the last 10 years for the fund showed expenses have averaged about 0.25% of the fund value over that period.

The method used to determine the discount rate assumption for the Legislators' Retirement System was the same as the one used for the PERF that was presented to the Board in March. We have taken into account both short and long term return expectations as well as reflecting the expected cash flows for the Legislators' Retirement System. Simulated returns were used together with the asset allocation mix adopted by the CalPERS Board to determine the 25th to 75th percentile range of the geometric expected return over a period of 21 years.

Below are the percentiles of the expected investment returns using a 16 year horizon both before and after reflecting the 0.25% in expected plan administrative expenses.

#### **Expected Geometric Investment Returns Over the Next 16 Years**

	<b>25<sup>th</sup> Percentile</b>	<b>50<sup>th</sup> Percentile (Median)</b>	<b>75<sup>th</sup> Percentile</b>
Expected Return (Before Administrative Expenses)	5.05%	6.28%	7.53%
Expected Administrative Expenses	(0.25%)	(0.25%)	(0.25%)
Expected Net Investment Return	4.80%	6.03%	7.28%

Based on the ASOP No. 27 guidelines, a reasonable range for the discount rate assumption is from 4.80% to 7.28%. Even though actuarial standards of practice allow a wide range for the discount rate assumption, it is generally recommended to select an assumption between the 25<sup>th</sup> and 50<sup>th</sup> percentile in

order for the fund to have at least a 50% chance of earning an investment return equal to or higher than the discount rate assumption

To be consistent with the decision that the Board made in March for the PERF, we are recommending the use of a minimal margin for adverse deviation and to lower the discount rate assumption to 6.00%. As shown above, the asset allocation strategy selected by the Board in March has a median investment return net of administrative expenses of 6.03%. Lowering the discount rate to 6.00% implies that the Board will elect a margin for adverse deviation of 3 basis points. The valuation results presented in this agenda item along with the attached valuation report were all prepared using a discount rate assumption of 6.00%.

If the Board were to prefer to use a larger margin for adverse deviation, the Board could adopt instead a discount rate of 5.75%. The margin for adverse deviation would be increased from 3 basis points to 28 basis points. Under a 5.75% discount rate assumption, the contribution rate for fiscal year 2011-2012 would remain the same and the plan would remain superfunded on an actuarial value basis.

Since the attached valuation report was prepared using a discount rate assumption of 6.00%, if the Board were to adopt instead a discount rate of 5.75% then the contents of the valuation report would need to be revised to reflect the lower discount rate.

We believe that either using a lower margin for adverse deviation and choosing a discount rate assumption of 6.00% or lowering this assumption to 5.75% would be a reasonably prudent assumption. Both assumptions would be able to provide for an actuarially sound system over time with a 5.75% assumption providing slightly more security than remaining at 6.00%.

### **Member Calculations**

Since all member calculations should use a discount rate assumption consistent with the one used in actuarial valuations, we recommend that the 6.00% discount rate assumption be used in all affected member calculations effective as follows:

- For service credit purchases under the “present value” method, the use of the new discount rate will apply to all applications postmarked on or after May 19, 2011.
- For retirement applications, any application with a retirement date on or after May 19, 2011 will be subject to the new discount rate.

**V. STRATEGIC PLAN:**

This item is not a specific product of the Strategic or Annual Plans but is part of the regular and ongoing workload of the Actuarial & Employer Services Division.

**VI. RESULTS/COSTS:**

See enclosed actuarial report.

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Actuarial Office

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ALAN MILLIGAN  
Chief Actuary

Attachment